CONTENTS

No. 1.—MARCH.

PAGE

ATKIN, M., FENNING, J., HEADY, J. A., KENNAWAY, E. L., AND KENNAWAY, N. M. —The Mortality from Cancer of the Skin and Lip in Certain Occupations. 1

JAPHA, E. M.—The Treatment of Retinal Glioma 16

JOLLES, B.—The Study of Connective-Tissue Reaction to Radiation. The Sieve or Chess Method 27

DALE, W. M., DAVIES, J. V., AND MEREDITH, W. J.—Further Observations on the Protection Effect in Radiation Chemistry 31

BURCHELL, M. M., EARLE, J. H. O., AND MACLAGAN, N. F.—Urinary Cholesterol in Cancer: Urinary Cholesterol Excretion in Cancer Patients and Control Subjects 42

BURCHELL, M. M., AND MACLAGAN, N. F.—Urinary Cholesterol in Cancer: Chemical State of Urinary Cholesterol and Methods of Estimation . . 52

ROBINSON, ALICE M., AND GOULDEN, F.—A Qualitative Study of Urinary 17-Ketosteroids in Normal Males and in Men with Prostatic Disease . . 62

CAMPBELL, J. G.—The Cultivation of Tumours in the Fertile Egg, with Special Reference to Associated Ectodermal Lesions of the Chorioallantoic Membrane 72

BEGG, A. M.—Intranasal Administration of Mammary Tumour Milk Factor . 88

GORER, P. A., AND LAW, L. W.—An Attempt to Demonstrate Neutralizing Antibodies to the Mammary Tumour "Milk Agent" in Mice 90

COWEN, P. N.—Inhibition of the Carcinogenic Properties of Urethane by Pentose Nucleotides 94

STRONG, L. C.—The Induction of Mutations by a Carcinogen 97

BERENBLUM, I., AND SHUBIK, P.—An Experimental Study of the Initiating Stage of Carcinogenesis, and a Re-examination of the Somatic Cell Mutation Theory of Cancer 109

BOYLAND, E., AND HORNING, E. S.—The Induction of Tumours with Nitrogen Mustards 118

HIEGER, I.—Carcinogenic Activity of Lipoid Substances 123

HOCH-LIGETI, CORNELIA, HOCH, H., AND GOODALL, K.—Investigations on the Serum Proteins in Rats during the Development of Hepatic Tumours due to Feeding p-Dimethylaminoazobenzene 140

ELSON, L. A., KENNAWAY, E. L., AND TIPLER, M. M.—The Effect of 1:2:5:6-Dibenzanthracene on the Ascorbic Acid Content of the Liver of Rats Maintained on High and Low Protein Diets 148

GOULDEN, F., AND TIPLER, M. M.—Experiments on the Identification of 3:4-Benzpyrene in Domestic Soot by Means of the Fluorescence Spectrum . 157

No. 2.—JUNE.

PAGE

VERSLUYS, J. J.—Cancer and Occupation in the Netherlands. . . . 161

LEES, J. C., AND PARK, W. W.—The Malignancy of Cancer at Different Ages: A Histological Study 186

CAMPBELL, J. G.—Spontaneous Hepatocellular and Cholangiocellular Carcinoma in the Duck. An Experimental Study 198

HORNING, E. S.—The Effects of Castration and Stilboestrol on Prostatic Tumours in Mice 211

FOULDS, L.—Mammary Tumours in Hybrid Mice: the Presence and Transmission of the Mammary Tumour Agent 230

FOULDS, L.—Mammary Tumours in Hybrid Mice: Hormone-Responses of Transplanted Tumours 240

DMOCHOWSKI, L.—Survival of the Milk Factor in a Transplantable Breast Tumour in Mice 246

CRAIGIE, JAMES.—A Pressure Mincer for the Preparation of Tumour Suspensions 249

CRAIGIE, JAMES.—A Drying Apparatus for the Study of Tumour Transmission . 250

MANN, IDA.—A Study of Cell Survival in Embryonic Tissue Grafts in Inbred Strains of Mice under Various Conditions 255

GYE, W. E., BEGG, A. M., MANN, IDA, AND CRAIGIE, J.—The Survival of Activity of Mouse Sarcoma Tissue after Freezing and Drying 259

CRAIGIE, JAMES.—The Preservation of Suspensions of Tumour Cells in Dextrose at Low Temperatures 268

BULLOUGH, W. S.—The Effect of a Restricted Diet on Mitotic Activity in the Mouse 275

BIELSCHOWSKY, F., AND BULLOUGH, W. S.—Epidermal Mitotic Activity and the Induction of Skin Tumours in Mice 282

HOCH-LIGETI, CORNELIA.—Primary Pancreatic Tumours in Rats Fed *p*-Dimethylaminoazobenzene 285

PEACOCK, ANDREE, AND PEACOCK, P. R.—Attempts to Induce Epithelial Tumours in Fowls 289

PEACOCK, P. R., BECK, S., AND ANDERSON, W.—The Influence of Solvents on Tissue Response to Carcinogenic Hydrocarbons 296

CALCUTT, G.—3:4-Benzpyrene as an –SH Inhibitor 306

No. 3.—SEPTEMBER.

PAGE

HEADY, J. A., AND KENNAWAY, E. L.—The Increase in Deaths Attributed to Cancer of the Lung 311

UNGAR, H.—Familial Carcinoma of the Duodenum in Adolescence . . . 321

GUNZ, F. W.—Culture of Human Leukaemic Blood Cells *In Vitro*; Some Effects of X-rays 330

FOULDS, L.—Mammary Tumours in Hybrid Mice: Growth and Progression of Spontaneous Tumours 345

DMOCHOWSKI, L., AND ORR, J. W.—Induction of Breast Cancer by Oestrogens and Methylcholanthrene in High- and Low-Breast-Cancer Strain Mice . . 376

BERENBLUM, I., AND SHUBIK, P.—The Persistence of Latent Tumour Cells Induced in the Mouse's Skin by a Single Application of 9:10-Dimethyl-1:2-Benzanthracene 384

CRABTREE, H. G.—The Relative Carcinogenic Activity of Six Isomeric Aminoazotoluenes 387

BRUZZONE, S.—Prevention of Abdominal Fibroids Induced with Artificial Oestrogens 398

VAZQUEZ-LOPEZ, E.—The Effects of Thiourea on the Development of Spontaneous Tumours in Mice 401

ELSON, L. A., AND LAMERTON, L. F.—The Influence of the Protein Content of the Diet on the Response of Walker Rat Carcinoma 256 to X-radiation . 414

BARKER, G. R., DHAR, M. M., AND PARSONS, L. D.—The Effects of Injection of Purine and Pyrimidine Compounds on Grafted Mice 427

POWELL, A. K., AND CALCUTT, G.—Further Experiments on the *In Vitro* Metabolism of 3:4-Benzpyrene in the Mouse Skin 430

No. 4.—DECEMBER.

PAGE

HARNETT, W. L.—A Statistical Report on 955 Cases of Cancer of the Cervix Uteri and 321 Cases of Cancer of the Corpus Uteri. 433

CLEMMESEN, J.—The Status of Genetical Studies in Human Cancer. . . 474

CHRISTENSEN, E., KLÆR, W., AND WINBLAD, S.—Meningeal Tumours with Extracerebral Metastases 485

PULLINGER, B. D.—Squamous Differentiation in Mouse Mammae: Spontaneous and Induced 494

LASNITZKI, I.—Some Effects of Urethane on the Growth and Mitosis of Normal and Malignant Cells *In Vitro* 501

WOODHOUSE, D. L.—The Composition of Nucleic Acids: The Guanine and Thymine Content of Nucleic Acids Isolated from Normal Tissues and Animal Tumours 510

DMOCHOWSKI, L., AND ORR, J. W.—Chemically Induced Breast Tumours and the Mammary Tumour Agent 520

DMOCHOWSKI, L.—Some Data on the Distribution of the Milk Factor . . 525

HALL, W. H., AND BIELSCHOWSKY, F.—The Development of Malignancy in Experimentally-Induced Adenomata of the Thyroid 534

BIELSCHOWSKY, F., GRIESBACH, W. E., HALL, W. H., KENNEDY, T. H., AND PURVES, H. D.—Studies on Experimental Goitre: The Transplantability of Experimental Thyroid Tumours of the Rat 541

BIELSCHOWSKY, F.—The Role of Thyroxine Deficiency in the Formation of Experimental Tumours of the Thyroid 547

RASK-NIELSEN, R.—Investigations into the Varying Manifestations of Leukaemic Lesions Following Injections of 9:10-Dimethyl-1:2-Benzanthracene into Different Subcutaneous Sites in Street Mice 549

COOK, J. W., AND SCHOENTAL, R.—Effect of Choline on Experimental Carcinogenesis 557

MEDUSKI, J. W.—The Ascorbic Acid and Glutathione Content of the Livers of Rats with Sarcomata Induced by 1:2:5:6-Dibenzanthracene 559

HOCH-LIGETI, CORNELIA.—Effects of Repeated X-Radiation of the Whole Body on the Development of Tumours in Rats Due to Feeding *p*-Dimethylaminoazobenzene 562